

What is claimed is:

1. A method of reconciling a first data structure with a second data structure that is a subsequently modified version of the first data structure, comprising:

accessing each node in the first data structure for which a change has been made to a corresponding node in the second data structure; and

for each accessed node,

determining if the change made to the corresponding node in the second data structure creates a collision with the first data structure; and

if the change made to the corresponding node in the second data structure does not create a collision with the first data structure, making the change to the accessed node in the first data structure.

2. The method recited in claim 1, further comprising:

determining that the change made to the corresponding node in the second data structure creates a collision with the first data structure; and

determining whether the collision is mandatory collision or a discretionary collision.

3. The method recited in claim 2, further comprising:

determining that the change made to the corresponding node in the second data structure creates a discretionary collision with the first data structure, and

making the change to the accessed node in the first data structure.

4. The method recited in claim 2, further comprising:

determining that the change made to the corresponding node in the second data structure creates a discretionary collision with the first data structure;

determining whether the discretionary collision will allow the change made to the corresponding node in the second data structure to be made to the accessed node; and

if the discretionary collision will allow the change made to the corresponding node in the second data structure to be made to the accessed node, making the change to the accessed node.

5. The method recited in claim 1, further comprising:

employing a log of changes to the second data structure to determine if a change made to a corresponding node in the second data structure creates a collision with the first data structure.